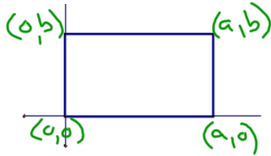
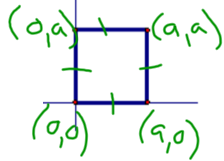


8-7 Coordinate Proof with Quadrilaterals

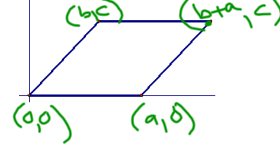
Rectangle



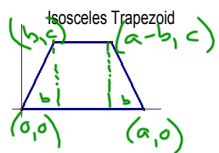
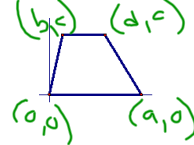
Square



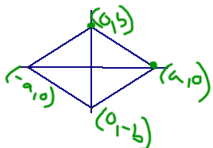
Parallelogram



Trapezoid

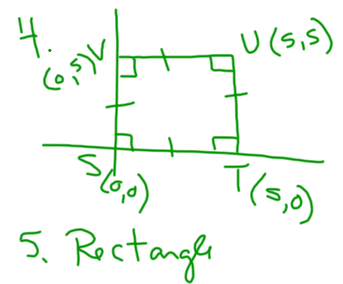


Rhombus

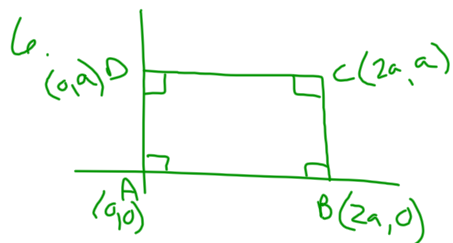


Worksheet

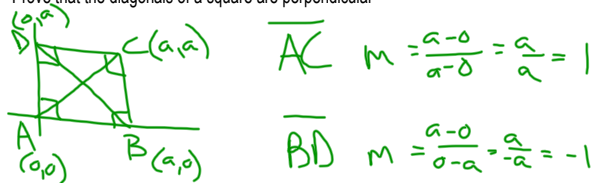
1. $C(c,c)$
2. $N(b,c)$
3. $B(b,c)$
 $C(a+b,c)$



5. Rectangle

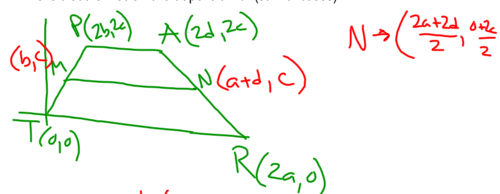


Prove that the diagonals of a square are perpendicular



$\overline{AC} \perp \overline{BD}$ b/c their slopes are opposite reciprocals

Prove that the median of a trapezoid = $\frac{1}{2}$ (sum of bases)



$$MN = \frac{1}{2}(PQ + TR)$$

$$MN = \sqrt{(a+d-b)^2 + (c-c)^2}$$

$$= \sqrt{(a+d-b)^2}$$

$$MN = a+d-b$$

$$TR = \sqrt{(2a-0)^2 + (0-2c)^2}$$

$$= \sqrt{(2a)^2}$$

$$TR = 2a$$

$$PQ = \sqrt{(2d-2a)^2 + (2c-2c)^2}$$

$$PQ = 2d-2a$$

$$a+d-b = \frac{1}{2}(2a+2d-2b)$$

$$a+d-b = a+d-b \checkmark$$

$$MN = \frac{1}{2}(TR + PQ)$$

p450
11-17, 19, 20